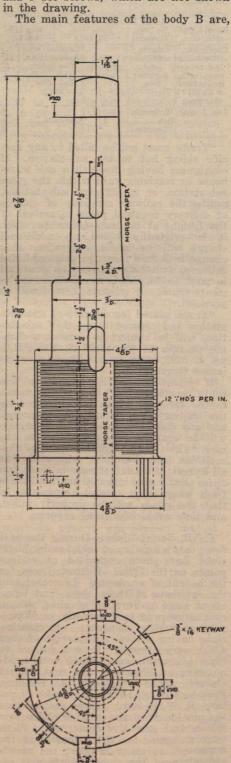
Railway Mechanical Methods and Devices.

Boring Tool for Superheater Flue Holes.

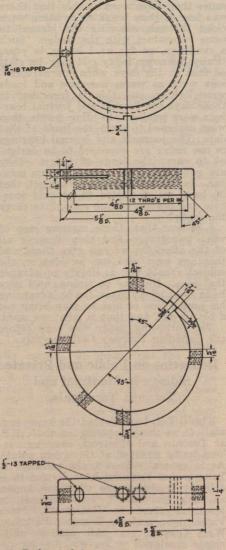
The accompanying drawings show a tool for the removal of material from superheater flue holes in flue sheets. The tool consists of a body B, and adjust-ing collar C, a retaining collar D and cutting tools E, also an adjusting screw and 5 set screws, which are not shown

and 4 slots to receive the cutting tools. The adjusting collar C has a slot at S. The purpose of this slot is to produce a The purpose of this slot is to produce a binding action upon the threads, by the use of an adjusting screw at T, so that the collar may be held in place at the proper adjustment of the cutting tools. There is also a recess at R to receive the ends of the cutting tools and help to bind them to the body of the tool. The retaining collar D is bored to a slip-fit for the largest diameter of the body B. As shown in the drawing, it is held in place by a key and a set screw. The cut-ting tools are made to the dimensions shown in the drawing. The angle shown end of the threading, and held in place by the binding screw. The cutting tools are then inserted in their respective slots and the retaining collar is placed



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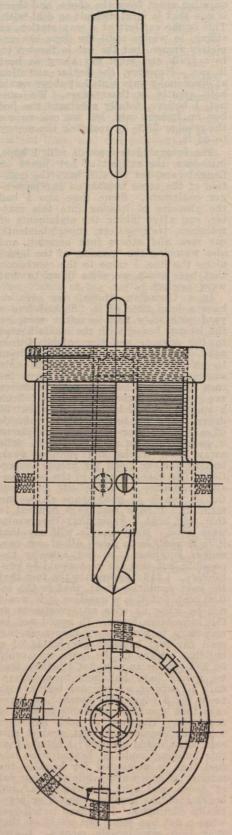
shank of standard Morse taper; the threading, which is made to fit the ad-justing collar C, a hole bored longitudinally, also to a standard Morse taper;



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at F is quite essential to the successful operation of the tool. This angle is made nine degrees. Two opposite tools have the high part of the cutting edge on the outside while the other two have on the outside, while the other two have the high part on the inside. This not only reduces the strain on the tools, but also lessens the driving power required. The cutting tools are made of high speed tool steel, and the body and all other parts are made of machinery steel. The complete tool is shown assembled

at A. Its operation is simple. When the cutting tools are new, the adjust-ing collar is placed at the extreme shank



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on the end of the tool as shown. The screws are then tightened, thus set clamping the cutting tools, and the col-